

SEQUENCE LISTING

<110> NIKOLICH, MIKELJON

HOOVER, DAVID

5 <120> IMMUNOGENIC COMPOSITIONS INCLUDING ROUGH PHENOTYPE BRUCELLA
HOST STRAINS AND COMPLEMENTATION DNA FRAGMENTS

<130> ARMY 176

10 <140> NOT KNOWN

<141> 2003-12-11

<150> US 60/402,164

15 US 60/533,016

<151> 2002-12-12

2003-09-15

20 <160> 2

<210> SEQ ID NO 1

<211> LENGTH: 2693

25 <212> TYPE: DNA

<213> ORGANISM: Brucella melitensis

<220> FEATURE:

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<210> SEQ ID NO 2

<211> LENGTH: 410

<212> TYPE: PRT

20 <213> ORGANISM: Brucella melitensis

<400> SEQUENCE: 2

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Pro Ala Lys Tyr Arg Gly Gly Ser Leu Arg

25 15 20

Val Thr Lys Asn Ile Val Arg Met Leu Leu

25 30

	Lys Gly Ser Gln Asn Tyr Gly Glu Gln Cys	
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	Gln Val Arg Leu Ala Val Arg Ala Asp Thr	
	45	50
5	Tyr Asp Ile Gly Glu Glu Phe Arg Asp Leu	
	55	60
	Ile Asp Asn Gly Val Glu Val Arg Glu Ile	
	65	70
10	Ser Phe Lys Glu Val Pro Pro Glu Asp Val	
	75	80
	Asn Asn Ala Asn Tyr Phe Gln Gly Arg Asn	
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	Ile Asp Leu Gln Ser Arg Thr Tyr Trp Leu	
15	95	100
	Met Glu Asp Gly Gln Asn Asn Cys Ala Asp	
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	Ser Asp Leu Trp Leu Val Val Ser Tyr Ser	
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20	Val Glu Tyr Pro Ile Ala Pro Ile Arg Pro	
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	Thr Leu Ile Phe Ala Thr Asp Phe Ile Gln	
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	Arg Tyr Val Pro Asp Ile Ile Trp Pro Pro	
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	Arg Pro Gly Glu Gly Asp Ala Glu Ala Leu	
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	Ala Phe Leu Arg Gln Ser Asp Gly Val Leu	
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	Ala Thr Thr Pro His Thr Arg Leu Asp Ala	
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5	Ile Ser Tyr Ala Gly Leu Pro Ala Ser Lys	
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	Val Tyr Leu Ala Pro Met Glu Phe Asp Pro	
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	Thr Phe Leu Asp Arg Tyr Arg Ser Val Ser	
10	205	210
	Lys Val Lys Glu Pro Tyr Phe Leu Trp Pro	
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	Thr Asn Pro Asn Ala His Lys Asn His Ala	
	225	230
15	Lys Ala Phe Gln Ala Leu Asp Leu Tyr Tyr	
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	Gly Lys Leu Lys Gly Lys Ile Lys Thr Lys	
	245	250
	Ile Val Gly Val Ser Ser Val Arg Met Asp	
20	255	260
	Pro Ser His Arg Trp Gln Ala Lys Tyr Glu	
	265	270
	Asn Lys Ala Tyr Val Lys Ser Val Arg Glu	
	275	280
25	Ile Val Ala Gly Leu Asp Asn Leu Lys Ser	
	285	290
	Asn Val Glu Phe Ala Gly Glu Val Ala Asp	

	295	300
	Lys Glu Tyr Ala Glu Leu Leu Ala Ser Ala	
	305	310
	Cys Phe Leu Trp His Pro Thr Leu Ala Asp	
5	315	320
	Asn Gly Thr Phe Ala Ala Val Glu Ala Ala	
	325	330
	Tyr Met Gly Cys Pro Thr Leu Ser Asn Asp	
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10	Tyr Pro Gln Met Arg Tyr Ile Ser Asn Arg	
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	Phe Glu Ile Pro Met Gln Tyr Phe Asn Ala	
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	Arg Ser Val Lys Glu Met Ala Ser Ala Leu	
15	365	370
	Lys Gln Met Glu Glu Thr Pro Ile Asp Val	
	375	380
	Gly Leu Leu Pro Ser Arg glu Thr Leu Ser	
	385	390
20	Leu His Ser Trp Glu Ala His Ala Ser Glu	
	395	400
	Tyr Trp Asp Val Ile Val Arg Ala Ala Ala	
	405	410

25